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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,124	01/02/2002	Ronald John Vanderhelm	034300-192	7461

7590 11/28/2006
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EXAMINER

LE, DANH C

ART UNIT PAPER NUMBER

2617

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,124

Applicant(s)

VANDERHELM, RONALD JOHN

Examiner

DANH C. LE

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-19, 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzarotto (US 6,782,245) in view of Pitsoulakis (US 7,092,375).

As to claim 1, Lazzarotto teaches a core wireless engine design (figure 2) comprising:

a transceiver

a microprocessor; and

a standardized interface arrangement, the standardized interface arrangement adapted to be interconnected to a variety types of host interfaces with universal serial bus (figure 3A and its description).

Lazzarotto fails to teach a plurality of bus standard. Pitsoulakis teaches a plurality of bus standards (figure 9, system bus and its description). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Lazzarotto in order to receive signals such as data, control and serial/detonator.

As to claim 2, Lazzarotto teaches the core wireless engine design of Claim 1 wherein the core wireless engine is designed to fit into a variety of form factor units (col.13, lines 16-45).

As to claim 3, Lazzarotto teaches the core wireless engine design of Claim 2 wherein the core wireless engine is designed to fit within PCMCIA and Compact Flash cards (col.13, lines 16-45).

As to claim 4, Lazzarotto teaches a system including the core wireless engine design of Claim 1, further including a host interface interconnected to the standardized interface arrangement (figure 2).

As to claim 5, Lazzarotto and Pitsoulakis teaches the system of Claim 4 wherein the core wireless engine design includes a field programmable gate array and the host interface is positioned within the field programmable gate array (figure 9, 908).

As to claim 6, Lazzarotto teaches the core wireless engine design of Claim 1 wherein the variety of host interfaces includes a PCMCIA interface and a Compact Flash card interface (col.13, lines 16-45).

As to claim 7, Lazzarotto teaches the core wireless engine design of Claim 1 wherein the variety of host interfaces includes a PCMCIA interface as well as a Compact Flash interface (col.13, lines 16-45).

As to claim 8, Lazzarotto teaches the core wireless engine design of Claim 2 wherein the variety of form factors includes a Compact Flash form factor (col.13, lines 16-45).

As to claim 9, Lazzarotto teaches the core wireless engine design of Claim 2 wherein the core wireless engine is housed in a form factor that is less than 5 millimeters thick (col.13, lines 16-45).

As to claim 10, Lazzarotto teaches the design according to Claim 1 wherein the core wireless engine is less than 36 millimeters wide and 41 millimeters high (col.13, lines 16-45).

As to claim 11, Lazzarotto teaches a core wireless engine design (figure 2) comprising:

a transceiver

a microprocessor; and

a standardized interface arrangement, the standardized interface arrangement adapted to be interconnected to a variety types of host interfaces, wherein the core wireless design is adapted to fit into a variety of form factor units (figures 5B, 510 and col.10, lines 36-50, figure 6B, 610 and col.12, lines 1-12).

Lazzarotto fails to teach a plurality of bus standard. Pitsoulakis teaches a plurality of bus standards (figure 9, system bus and its description). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Lazzarotto in order to receive signals such as data, control and serial/detonator.

As to claim 12, Lazzarotto teaches the system including the core wireless design of Claim 11 wherein the system further includes a host interface (col.13, lines 16-45).

As to claim 13, the limitation of the claim is the same limitation of claim 5; therefore, the claim is interpreted and rejected as set forth as claim 5.

As to claim 14, Lazzarotto and Pitsoulakis teaches the core wireless engine design of Claim 1, wherein the standardized interface arrangement includes a standardized set of registers (Pitsoulakis figure 9, 902).

As to claim 15, Lazzarotto teaches the core wireless engine design of Claim 11, wherein the variety of host interfaces include a PCMCIA interface as well as a Compact Flash interface (col.13, lines 16-45).

As to claim 16, Lazzarotto teaches the core wireless engine design of Claim 11 wherein the variety of form factors includes a Compact Flash form factor (col.13, lines 16-45).

As to claim 17, Lazzarotto teaches the core wireless engine design of Claim 11 wherein the core wireless engine is housed in a form factor that is less than 5 millimeters thick (col.13, lines 16-45).

As to claim 18, Lazzarotto teaches the design according to Claim 11 wherein the core wireless engine is less than 36 millimeters wide and 41 millimeters high (col.13, lines 16-45).

As to claim 19, Lazzarotto teaches a core wireless engine design (figure 8 and col.13, lines 16-45) comprising:

- a transceiver

- a microprocessor; and

a standardized interface arrangement, the standardized interface arrangement adapted to be interconnected to a variety types of host interfaces, wherein the core wireless engine design is adapted to fit into a variety of form factor units including PCMCIA and Compact Flash cards (figures 3 and its description).

Lazzarotto fails to teach a plurality of bus standard. Pitsoulakis teaches a plurality of bus standards (figure 9, system bus and its description). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Lazzarotto in order to receive signals such as data, control and serial/detonator.

As to claim 22, Lazzarotto teaches the core wireless engine design of Claim 19 wherein the standardized interface arrangement is adapted to be interconnected to a variety of host interfaces (figure 2).

As to claim 23, Lazzarotto teaches the core wireless engine design of Claim 19 wherein the variety of host interfaces includes a PCMCIA interface as well as a Compact Flash interface (col.13, lines 16-45).

As to claim 24, Lazzarotto teaches the core wireless engine design of Claim 19 wherein the variety of form factors includes a Compact Flash form factor (col.13, lines 16-45).

As to claim 25, Lazzarotto teaches the core wireless engine design of Claim 19 wherein the standardized size is less than 5 millimeters thick (col.13, lines 16-45).

As to claim 26, Lazzarotto teaches the core wireless engine design of Claim 19 wherein the standardized size is less than 36 millimeters wide and 41 millimeters high (col.13, lines 16-45).

As to claim 27, Lazzarotto teaches a method of producing a wireless modem unit (figure 2 and col.13, lines 16-45), comprising:

selecting a core wireless design from a number of core wireless engine designs, each core wireless engine design having a standardized interface arrangement adapted to be interconnected to a variety types of host interfaces and the core wireless design adapted to fit into a variety of form factor units;

selecting a host interface and form factor unit from the variety of host interfaces and variety of form factor units and combining the selected core wireless design and selected host interface and form factor unit to produce a wireless modem unit (figure 3 and its description).

Lazzarotto fails to teach a plurality of bus standard. Pitsoulakis teaches a plurality of bus standards (figure 9, system bus and its description). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Pitsoulakis into the system of Lazzarotto in order to receive signals such as data, control and serial/detonator.

As to claim 28, Lazzarotto teaches the method of Claim 27 wherein the variety of host interfaces includes a PCMCIA interface as well as a Compact Flash interface.

As to claim 29, Lazzarotto teaches the method of Claim 27 wherein the variety of form factors includes a Compact Flash form factor.

As to claim 30, Lazzarotto teaches the method of Claim 27 wherein the standardized size is less than 5 millimeters thick.

As to claim 31, Lazzarotto teaches the method of Claim 27 wherein the standardized size is less than 36 millimeters wide and 41 millimeters high.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 21 is rejected under 35 U.S.C 103(a) as being unpatentable over

Lazzarotto and Pitsoulakis in view of Shiozaki (US 2002/0176223).

As to claim 21, Lazzarotto and Pitsoulakis teaches the core wireless engine design of Claim 19 wherein the core wireless engine is further adapted to fit within a PC board. Lazzarotto and Pitsoulakis fails to teach fitting within a Handspring Visor Springboard card. Shiozaki teaches fitting within a Handspring Visor Springboard card (paragraph 0005). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Shiozaki into the system of Lazzarotto and Pitsoulakis in order to add more modules and cellular communication capabilities as Shiozaki suggested (paragraph 0005).

3. Claims 20 and 32 are rejected under 35 U.S.C 103(a) as being unpatentable over Lazzarotto and Pitsoulakis

As to claims 20 and 32, Lazzarotto and Pitsoulakis teaches the method of wireless peripheral, Lazzarotto and Pitsoulakis fails to teach the form factor of a mini PCI card and a printed circuit board that is offset from tea centerline that defines the thickness of a form factor unit in which the core wireless engine design is housed. However, the Examiner takes Official Notice that these reciting limitations are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of recited limitation into the system of Lazzarotto and Pitsoulakis in order to enhance the system performance of the multiple form factor PC card system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Scheer (US 5,460,224) teaches integrated circuit card .. using the contacts.

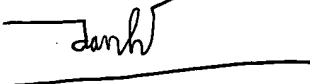
B. Moore (US 5,682,548) teaches interface component for .. not quiet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



November 10, 2006
DAN H. [unclear]
PRIMARY EXAMINER